

FUNCTIONAL AREA 14

Telecommunications (TEL)

Incumbents in this functional area provide expertise and general consultation to both internal and external clients on a wide array of issues related to telecommunications systems.

The ITS will provide support to management in the development of telecommunications systems/services, policies and long range plans. They are expected to have the knowledge and ability to acquire, install, equip, maintain, and operate new or existing business telecommunications systems and services.

Incumbents assess strategic telecommunications needs and requirements; develop strategic and tactical policies commensurate with business and system requirements, recommend industry standards, service level agreements, and telecommunications solutions; provide expert advice in the selection of telecommunications equipment including building or campus area wire/wireless facilities; operate, monitor and maintain telecommunications systems and/or oversee contract vendors who perform those functions.

They perform the feasibility analysis, implementation, and evaluation of alternative telecommunications solutions; conduct and/or oversee system design, installation and testing, implementation oversight, and administration activities. They also develop the initial or upgrade designs of telecommunications wiring plans for building or campus area networks, including detailed configuration plans to accommodate facility floor plans, hardware requirements and telecommunications equipment/housing.

Telecommunications	Assistant Information Technology Specialist	Information Technology Specialist I	Information Technology Specialist II	Information Technology Specialist III
Knowledge of:				
Basic processes for budgets, procurements, and contracting	X	X	X	X
Basic fundamentals of telecommunications design and theory	X	X	X	X
Telecommunications documentation methods and procedures	X	X	X	X
Telecommunications systems and services		X	X	X
Telecommunications systems and client support		X	X	X
Contracting methods, requirements, and procedures for telecommunications acquisitions		X	X	X
Methods and practices to prepare the telecommunications organization to meet the business needs for service delivery		X	X	X

Telecommunications test management techniques including principles, methods and tools for the effective coordination of the testing process and execution of tests through the lifecycle of development plans		X	X	X
Telecommunications principles and practices		X	X	X
Principles and methods of systems analysis		X	X	X
New and emerging telecommunications and/or industry trends		X	X	X
Application of telecommunications to support business goals and objectives and principles of organizational financial management as it relates to telecommunications project management			X	X
Cost-benefit analysis principles and methods			X	X
Current trends for telecommunications strategic planning			X	X
Methods for researching and analyzing external telecommunications products and services to determine their potential for meeting organizational standards and business needs			X	X
Methods, metrics, tools and techniques of telecommunications Business Process Reengineering (such as relational data modeling, functional business models, and process modeling)			X	X
Methods, techniques, and tools used for risk assessment and mitigation of risk to telecommunications projects			X	X
Application of telecommunications principles, methods, techniques and tools for the effective management of projects from initiation through to implementation (such as telecommunications project initiation and planning, work breakdown schedules for telecommunications projects, telecommunications project schedule development, critical path analysis, project direction & control, earned value analysis, project close-out activities & post-implementation close-out activities)			X	X
Telecommunications requirement analysis principles and methods			X	X
Telecommunications quality assurance principles			X	X
Methods, tools and techniques of performance management/measurement			X	X
Telecommunications systems security methods and procedures			X	X
Telecommunications performance monitoring principles and methods				X
Principles of organizational development				X

and telecommunications change management practices				
Complex converging technologies and their impact on telecommunications systems and projects				X
Ability to:				
Assist on a wide array of issues related to feasibility analysis, implementation, and evaluation of telecommunications solutions to business and administrative processes.	X	X	X	X
Assist in developing or develop independently, the technical solutions relative to the development of telecommunications contracts or revisions	X	X	X	X
Under guidance or independently, write telecommunications specifications	X	X	X	X
Assist in or perform the monitoring of the implementation of telecommunications systems to meet applicable requirements	X	X	X	X
Assist in or perform the preparation of telecommunications RFPs and respond to telecommunications proposals	X	X	X	X
Assist with or perform the identifying and defining of business or technical requirements applied to the design, development, implementation, management, and support of systems and networks	X	X	X	X
Assist with or perform the identifying and specifying of business requirements for new or enhanced systems and develop basic system specifications	X	X	X	X
Assist with or perform the preparation, justification, and/or administration of an organizational telecommunications budget	X	X	X	X
Assist with or perform the monitoring of telecommunications vendor performance to contract (such as analyze Statement of Work, define success criteria, and test product/system deliverables)	X	X	X	X
Assist with or perform the evaluation/testing and optimization of the functionality of communications systems, networks and data	X	X	X	X
Work with customers to resolve telecommunications technical and operational problems	X	X	X	X
Coordinate and consult with system vendors	X	X	X	X
Evaluate and/or recommend adoption of new or enhanced approaches to delivering telecommunications services		X	X	X
Identify and define business or technical requirements applied to the design,		X	X	X

development, implementation, management, and support of systems and networks				
Determine, evaluate and categorize potential impacts of telecommunications project risks		X	X	X
Develop telecommunications tactical plans to meet business enterprise goals and objectives		X	X	X
Establish and communicate telecommunications project goals and objectives		X	X	X
Estimate and plan telecommunications project timelines and milestones			X	X
Monitor telecommunications progress according to plan and administer telecommunications tasks and schedules		X	X	X
Interpret telecommunications policies, standards, and guidelines		X	X	X
Coordinate and/or lead multiple telecommunications projects		X	X	X
Assist in the review or design of building/campus wiring plan		X	X	X
Review detailed building/Campus wiring plans including requirements for hardware, wiring services, and security of facilities		X	X	X
Develop technical solutions relative to the development of telecommunications contracts or revisions			X	X
Provide advice and guidance on a wide range and variety of complex Telecommunications issues			X	X
Represent the organization in interactions with other organizations			X	X
Monitor the implementation of telecommunications systems to meet applicable requirements			X	X
Prepare telecommunications RFPs and respond to telecommunications proposals			X	X
Monitor and evaluate telecommunications vendor performance to contract (such as analyze Statement of Work, define success criteria, and test product/system deliverables)			X	X
Evaluate telecommunications proposals and select vendors, products or services			X	X
Manage change and its effects on telecommunications project resources			X	X
Monitor and evaluate the progress and outcomes of telecommunications operational plans			X	X
Evaluate/test and optimize the functionality of communications systems, networks and data			X	X

Prepare, justify, and/or administer an organizational telecommunications budget			X	X
Design detailed building/Campus wiring plans including requirements for hardware, wiring services, and security of facilities			X	X
Serve as consultant and subject matter expert to executive management and outside agencies on a wide range of issues pertaining to telecommunications planning, policy analysis and articulation, and project implementation and administration			X	X
Lead the development of telecommunications strategies to support an organization's business goals, and plan the implementation of those strategies				X
Negotiate terms of telecommunications vendor contracts, including contract revisions				X
Define and utilize telecommunications contract penalties				X
Administer and configure computerized telecommunications systems				X
Demonstrate an advanced level of administrative and technical knowledge, along with the leadership ability required to allow administration of the largest and most complex telecommunications solutions throughout the entire life cycle				X
Obtain certification in Telecommunications building wiring by a recognized standards group				X

Assistant Information Technology Specialist, (Telecommunications)

Incumbents assist more experienced telecommunications staff in developing, maintaining, and upgrading telecommunications systems in conjunction with others, including contractors and customers. This includes collection and analysis of business and technical requirements for development of a telecommunications system/service solution and operational monitoring of telecommunications systems.

Information Technology Specialist I, (Telecommunications)

Incumbents apply an understanding of telecommunications design and theory to assist with identifying and defining business or technical requirements applied to the design, development, implementation, management, and support of telecommunications systems and networks. This includes assisting with the evaluation/testing and optimization of networks, communications systems, telecommunications facilities, and data, and working with contractors who provide these systems and services.

Information Technology Specialist II, (Telecommunications)

Incumbents demonstrate proficiency in business and technical telecommunications competencies, with a specialization in telecommunications systems, services, client support, principles and practices including principles and methods of systems analysis. The ITS II applies knowledge of the organization's technology and business infrastructure to effectively perform the tasks or oversee contractors hired to perform the tasks that provide the full range of telecommunications systems design, acquisition, implementation, testing, acceptance, maintenance, and strategic planning for system replacement.

Information Technology Specialist III Range, A (Telecommunications)

Incumbents demonstrate expertise in the most complex business and technical telecommunications issues or technologies and participate in strategic and tactical planning and project management. The ITS III acts as a lead and advises other experts throughout the organization or in other organizations on a variety of situations and issues that involve applying or adapting new IT theories, concepts, principles, standards, methods, or practices related to the telecommunications field.